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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/933,822	09/19/97	BOWERS C	30-2138CIP1

EXAMINER	
YAO, S	
ART UNIT	**PAPER NUMBER**
1733	18

IM22/1031

HONEYWELL INTERNATIONAL INC.
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DATE MAILED: 10/31/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No.	Applicant(s)	
	08/933,822	BOWERS, CHARLES EDWARD	
	Examiner	Art Unit	
	Sam Chuan C. Yao	1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 October 2001* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16 and 18-21* is/are pending in the application.

4a) Of the above claim(s) *1-15,19 and 20* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *16, 18,and 21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 16, 18, and 21 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3 of copending Application No. 09/143,583 in view of Stahlecker et al (US 4,495,758) for reasons of record set forth in Paper No. 11 numbered paragraph 2.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 16, 18, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lofquist (US 5,478,624) in view of Stahlecker et al (US 4,495,758) and Scott (US 4,668,552) for reasons of record set forth in Paper No. 15 numbered paragraph 4.

5. Claims 16, 18 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stahlecker et al (US 4,495,758) taken with Lofquist (US 5,478,624) and Scott (US 4,668,552) for reasons of record set forth in Paper No. 15 numbered paragraph 5.

6. Claims 16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scott (US 4,668,552) in view of Stahlecker et al (US 4,495,758) for reasons of record set forth in Paper No. 15 numbered paragraph 6.

Response to Arguments

7. Applicant's arguments filed on 10-08-01 have been fully considered but they are not persuasive.

In response to Applicant's arguments on page 2 regarding the Lofquist patent, Examiner agrees with Applicant that Lofquist fails to expressly teach ring spinning or wrap spinning to blend binder-fibers to base-fibers. However, Lofquist teaches that these fibers can be blended by any "conventional means" in forming a yarn (col. 3 lines 37-41). Stahlecker et al, directed to forming yarns from binder-fibers and base-fibers,

discloses combining these two fibers together by spirally wrapping (i.e. wrap-spinining) the binder-fibers around the base-fibers to form a yarn (abstract; col. 1 lines 9-40). Scott discloses forming a wrap yarn comprising a blend of binder-fibers and base-fibers, wherein the binder-fibers are uniformly and helically wrapped around the base-fibers and then the binder-fibers are heat-melted. In light of the collective teachings of these patents, absent any showing of unexpected benefit, it would have been obvious in the art, motivated by the desire to form a blended yarn comprising binder-fibers and base-fibers, to use a conventional yarn making technique such as the wrap-spinning technique taught by Stahlecker et al to form the blended yarn of Lofquist.

In response to Applicant's argument regarding the Stahlecker et al patent, assuming that the binder-fibers of Stahlecker et al does not contain heat-activated material, it would have been obvious in the art to use binder fibers containing heat-activated material in forming the yarn of Stahlecker et al in light of the teachings of Lofquist and Scott for reasons set forth in numbered paragraph 5 in Paper No. 15. The incentive for one in the art for using binder fibers containing heat-activated material would have simply been to obtain the advantage of enhancing the structural integrity (i.e. improve durability and wear resistance) of a resultant yarn by encapsulatingly bonding the base-fibers together as taught by Lofquist (col. 4 lines 26-29) instead of using binder fibers (assuming that it does not contain a heat-activated material) which only physically constrain the base-fibers.

In response to Applicant's argument regarding the Scott patent, Examiner strongly disagrees with Applicant's assertion that *"There is nothing in Scott et al to*

suggest that the binder strand should contain a heat-activated binder material that melts upon exposure of sufficient heat", Applicant's attention is directed to the abstract, column 4 lines 8-14, 56-65, column 6 lines 52-68, and figures 4,6 and 8. In these passages, Scott clearly teaches the binder fibers to be a thermoplastic adhesive copolymers having a fusible properties and relatively low melting point, and also teaches that the binder fibers "**melt**[s] into randomly arranged discrete portions of binder strand material when subjected to temperature at or above the relatively low melting point." (bold face and bracketing added). As for Applicant's argument regarding the binder strand retracting inwardly, it is submitted that Applicant's argument is not commensurate with the scope of the claims. The claims only require wrapping a binder fibers uniformly around a bundle of fiber to form a yarn, and then heating the yarn to melt the binder fibers. There is nothing in the recited claims which preclude the process taught by Scott, where binder fibers/strands are uniformly wrapped around a base strands/fibers, and then the binder fibers are retracted and melted during a heat-fusing process (figures 3-4; col. 6 lines 35-65).

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sam Chuan C. Yao whose telephone number is (703) 308-4788. The examiner can normally be reached on Monday-Friday with second Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael W Ball can be reached on (703) 308-2058. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7115 for regular communications and (703) 305-7718 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0651.

Sam Chuan C. Yao
Primary Examiner
Art Unit 1733

scy
October 30, 2001